This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

- 1. (Cancelled)
- 2. (Currently Amended) A compound comprising one or more identical or different groups of formula I1

$$-[(G)_g - (A)_a]_z$$
 II

wherein

G is, in case of multiple occurrence independently of one another,

$$\begin{array}{c|c} (R^3)_s & R^9 \\ \hline & (R^4)_t \\ \hline \end{array}$$

R<sup>3</sup> to R<sup>6</sup> R<sup>10</sup> are, independently of each other, F, Cl, Br, I, CN, NO<sub>2</sub>, NCS, SF<sub>5</sub> or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH<sub>2</sub> groups are optionally replaced, in each case independently from one

- 2 - DOCKET NO.: MERCK-3113

another, by -O-, -S-, -NH-, -NR<sup>0</sup>-, -SiR<sup>0</sup>R<sup>00</sup>-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY<sup>1</sup>=CY<sup>2</sup>- or -C $\equiv$ C- in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp,

are, independently of each other, F, Cl, Br, I, NO<sub>2</sub>, NCS, SF<sub>5</sub> or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or polysubstituted by F, Cl, Br, I or CN, and in which one or more non-adjacent  $CH_2$  groups are optionally replaced, in each case independently from one another, by  $-O_{-}$ ,  $-S_{-}$ ,  $-NH_{-}$ ,  $-NR^{0}_{-}$ ,  $-SiR^{0}R^{00}_{-}$ ,  $-CO_{-}$ ,  $-COO_{-}$ ,  $-OCO_{-}$ ,  $-OCO_{-}$ ,  $-S_{-}$ CO-,  $-COO_{-}$ ,  $-COO_{-}$ 

 $R^0$  and  $R^{00}$  are independently of each other H or alkyl with 1 to 12 C-atoms,

P is a polymerizable or reactive group,

Sp is a spacer group or a single bond,

s and t are independently of each other 0, 1, 2 or 3,

g is, in case of multiple occurrence independently of one another, 1, 2 or 3,

A is, in case of multiple occurrence independently of one another, -CX¹=CX²-, C≡C-, an aromatic or alicyclic ring or a group comprising two or more fused aromatic or alicyclic rings, wherein these rings optionally contain one or more hetero atoms selected from the group consisting of N, O and S, and are optionally mono- or polysubstituted by R³,

 $X^1$  and  $X^2$  are independently of each other H, F, Cl or CN,

 $\underline{Y^1}$  and  $\underline{Y^2}$  are independently of each other H, F, Cl or CN,

a is, in case of multiple occurrence independently of one another, 0 or 1, and

Z

wherein in case of multiple occurrence the groups [(G)g-(A)a] can be identical or different.

3. (Currently Amended)

A compound of formula I1A

$$R^{1}$$
-[(G)<sub>g</sub>-(A)<sub>a</sub>]<sub>z</sub>- $R^{2}$ 

I1A

wherein

G is, in case of multiple occurrence independently of one another,

 $R^3$  to  $\underline{R^4}$   $R^{40}$  are, independently of each other, F, Cl, Br, I, CN, NO<sub>2</sub>, NCS, SF<sub>5</sub> or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH<sub>2</sub> groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR<sup>0</sup>-, -SiR<sup>0</sup>R<sup>00</sup>-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY<sup>1</sup>=CY<sup>2</sup>- or -C $\equiv$ C- in such a manner that O and/or S atoms

are not linked directly to one another, or are P-Sp,

are, independently of each other, F, I, NO<sub>2</sub>, NCS, SF<sub>5</sub> or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or polysubstituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH<sub>2</sub> groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR<sup>0</sup>-, -SiR<sup>0</sup>R<sup>00</sup>-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY<sup>1</sup>=CY<sup>2</sup>- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp,

are, independently of each other, F, Cl, Br, I, NO<sub>2</sub>, NCS, SF<sub>5</sub> or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or polysubstituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH<sub>2</sub> groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR<sup>0</sup>-, -SiR<sup>0</sup>R<sup>00</sup>-, -CO-, -COO-, -OCO-O-, -S-CO-, -CO-S-, -CY<sup>1</sup>=CY<sup>2</sup>- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp,

 $R^0$  and  $R^{00}$  are independently of each other H or alkyl with 1 to 12 C-atoms,

P is a polymerizable or reactive group,

Sp is a spacer group or a single bond,

s and t are independently of each other 0, 1, 2 or 3,

g is, in case of multiple occurrence independently of one another, 1, 2 or 3,

A is, in case of multiple occurrence independently of one another, -CX¹=CX²-, -C≡C-, an aromatic or alicyclic ring or a group comprising two or more fused aromatic or alicyclic rings, wherein these rings optionally contain one or more hetero atoms selected from the group consisting of N, O and S, and are optionally mono- or polysubstituted by R³,

 $X^1$  and  $X^2$  are independently of each other H, F, Cl or CN,

Y<sup>1</sup> and Y<sup>2</sup> are independently of each other H, F, Cl or CN,

- a is, in case of multiple occurrence independently of one another, 0 or 1,
- z is an integer  $\geq 1$ ,

Rx, Rxx and

 $\underline{R^{xxx}}$   $\mathbb{R}^{0.000}$  are, independently of each other, H, aryl or alkyl with 1 to 12 C-atoms, and

- R' and R'' are, independently of each other, H or alkyl with 1 to 12 C-atoms, or

  OR' and OR'' OR' and OR'' together with the boron atom form a cyclic group having 2 to 10 C atoms.
  - 4. (Currently Amended) A compound of formula I2

$$R^{11}$$
- $(A^1-Z^1)_m$ - $(G^1)_u$ - $Z^3$ - $(A^3-Z^4)_q$ - $(G^2)_v$ - $(Z^2-A^2)_n$ - $R^{12}$  12

wherein

 $G^1$  and  $G^2$  are, independently of each other and in case of multiple occurrence of either  $G^1$  and/or  $G^2$  each of such  $G^1$  and  $G^2$  independently of one another,

 $R^3$  to  $\underline{R}^4$  and

<u>R^{10} to R^{12}</u> are, independently of each other, F, Cl, Br, I, CN, NO<sub>2</sub>, NCS, SF<sub>5</sub> or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH<sub>2</sub> groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR<sup>0</sup>-, -SiR<sup>0</sup>R<sup>00</sup>-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY<sup>1</sup>=CY<sup>2</sup>- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp,

- are, independently of each other, F, I, NO<sub>2</sub>, NCS, SF<sub>5</sub> or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or polysubstituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH<sub>2</sub> groups are optionally replaced, in each case independently from one another, by \_O-, -S-, -NH-, -NR<sup>0</sup>-, -SiR<sup>0</sup>R<sup>00</sup>-, -CO-, -COO-, -OCO-O-, -S-CO-, -COO-, -C
- R<sup>7</sup> to R<sup>10</sup> are, independently of each other, F, Cl, Br, I, NO<sub>2</sub>, NCS, SF<sub>5</sub> or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or polysubstituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH<sub>2</sub>

- 7 -

groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-,  $-NR^0-$ ,  $-SiR^0R^{00}-$ , -CO-, -COO-, -OCO-, -OCO-, -S-CO-, -COO-, -COO-,

R<sup>0</sup> and R<sup>00</sup> are independently of each other H or alkyl with 1 to 12 C-atoms,

P is a polymerizable or reactive group,

Sp is a spacer group or a single bond,

s and t are independently of each other 0, 1, 2 or 3,

g is, in case of multiple occurrence independently of one another, 1, 2 or 3,

 $A^1$  to  $A^3$  are, independently of each other and in case of multiple occurrence of any of  $A^1$  to  $A^3$  each of such  $A^1$  to  $A^3$  independently of one another,  $-CX^1=CX^2$ -,  $-C\equiv C$ -, an aromatic or alicyclic ring or a group comprising two or more fused aromatic or alicyclic rings, wherein these rings optionally contain one or more hetero atoms selected from the group consisting of N, O and S, and are optionally mono- or polysubstituted by  $R^3$ ,

 $X^1$  and  $X^2$  are independently of each other H, F, Cl or CN,

a is, in case of multiple occurrence independently of one another, 0 or 1,

z is an integer  $\geq 1$ ,

Z<sup>1</sup> to Z<sup>4</sup> are, independently of each other, -O-, -S-, -CO-, -COO-, -OCO-, -S-CO-, -CO- S-, -O-COO-, -CO-NR<sup>0</sup>-, -NR<sup>0</sup>-CO-, -OCH<sub>2</sub>-, -CH<sub>2</sub>O-, -SCH<sub>2</sub>-, -CH<sub>2</sub>S-, -CF<sub>2</sub>O-, -OCF<sub>2</sub>-, -CF<sub>2</sub>S-, -SCF<sub>2</sub>-, -CH<sub>2</sub>CH<sub>2</sub>-, -CF<sub>2</sub>CH<sub>2</sub>-, -CH<sub>2</sub>CF<sub>2</sub>-, -CF<sub>2</sub>CF<sub>2</sub>-, -CH=N-, -N=CH-, -N=N-, -CH=CR<sup>0</sup>-, -CY<sup>1</sup>=CY<sup>2</sup>-, -C=C-, -CH=CH-COO-, -OCO- CH=CH- or a single bond,

Y<sup>1</sup> and Y<sup>2</sup> are independently of each other H, F, Cl or CN,

m, n and q are independently of each other 0, 1, 2 or 3, and

u and v are independently of each other 0, 1 or 2, with u+v > 0.

- 5. (Previously Presented) A compound according to claim 3, wherein z is an integer of 2 to 5000.
- 6. (Previously Presented) A compound according to claim 3, wherein z is an integer of 1 to 15.
- 7. (Previously Presented) A compound according to claim 3, wherein one or both of R<sup>1</sup> and R<sup>2</sup> denote P-Sp-.
- 8. (Previously Presented) A compound according to claim 2, wherein R<sup>3</sup> and R<sup>4</sup> are, each independently, F, Cl, CN, alkyl, oxaalkyl, alkoxy, alkylcarbonyl or alkoxycarbonyl with 1 to 15 C-atoms or alkenyl, alkenyloxy or alkynyl with 2 to 15 C-atoms.
- 9. (Currently Amended) A compound according to claim 2, wherein  $\mathbb{R}^{5-10}$   $\mathbb{R}^{5-6}$  are, each independently, F, Cl, CN, C<sub>1</sub>-C<sub>20</sub>-alkyl that is optionally substituted with one or more fluorine atoms, C<sub>2</sub>-C<sub>20</sub>-alkenyl, C<sub>2</sub>-C<sub>20</sub>-alkynyl, C<sub>1</sub>-C<sub>20</sub>-alkoxy, C<sub>1</sub>-C<sub>20</sub>-thioalkyl, C<sub>1</sub>-C<sub>20</sub>-silyl, C<sub>1</sub>-C<sub>20</sub>-ester, C<sub>1</sub>-C<sub>20</sub>-amino, C<sub>1</sub>-C<sub>20</sub>-fluoroalkyl, or (CH<sub>2</sub>CH<sub>2</sub>O)<sub>m</sub> with m being an integer of 1 to 6, and

 $R^{7-10}$  are, each independently, F, Cl,  $C_1$ - $C_{20}$ -alkyl that is optionally substituted with one or more fluorine atoms,  $C_2$ - $C_{20}$ -alkenyl,  $C_2$ - $C_{20}$ -alkynyl,  $C_1$ - $C_{20}$ -alkoxy,  $C_1$ - $C_{20}$ -thioalkyl,  $C_1$ - $C_{20}$ -silyl,  $C_1$ - $C_{20}$ -ester,  $C_1$ - $C_{20}$ -amino,  $C_1$ - $C_{20}$ -fluoroalkyl, or  $(CH_2CH_2O)_m$  with m being an integer of 1 to 6.

10. (Previously Presented) A compound according to Claim 2, wherein A, each independently, are furane-2,5-diyl, thiophene-2,5-diyl, thienothiophene-2,5-diyl, dithienothiophene-2,6-diyl, pyrrol-2,5-diyl, 1,4-phenylene, azulene-2,6-diyl, pyridine-2,5-

diyl, pyrimidine-2,5-diyl, naphthalene-2,6-diyl, 1,2,3,4-tetrahydro-naphthalene-2,6-diyl, indane-2,5-diyl, or 1,4-cyclohexylene, wherein one or two non-adjacent CH<sub>2</sub> groups are optionally replaced by O and/or S, wherein these groups are unsubstituted, mono- or polysubstituted by R<sup>3</sup>.

- 11. (Previously Presented) A compound according to claim 2, wherein P is a vinyl ether, propenyl ether or oxetane group.
- 12. (Currently Amended) A compound according to claim 2, which includes a group wherein the group of formula I1 is of formula Ia, Ib, Ic, Id, Ie, If, Ig, Ih, Ii, Ik, Im, In or Io

- 10 - DOCKET NO.: MERCK-3113

wherein

R and R'—are, independently of each other, F, Cl, Br, I, CN, NO<sub>2</sub>, NCS, SF<sub>5</sub> or a straight chain or branched alkyl having 1 to 30 C atoms that is unsubstituted, mono-or poly substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH<sub>2</sub>-groups are optionally replaced, in each case independently from one another, by O, S, NH, NR<sup>0</sup>, SiR<sup>0</sup>R<sup>00</sup>, CO, COO, OCO, OCO of S, CY<sup>1</sup>=CY<sup>2</sup> or C=C in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp, B(OR')(OR"), SnR<sup>0</sup>R<sup>00</sup>R<sup>000</sup> or SiR<sup>0</sup>R<sup>000</sup>,

R" and R" are, independently of each other, F, Cl, Br, I, CN, NO<sub>2</sub>, NCS, SF<sub>5</sub> or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent

CH<sub>2</sub> groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR<sup>0</sup>-, -SiR<sup>0</sup>R<sup>00</sup>-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY<sup>1</sup>=CY<sup>2</sup>- or -C $\equiv$ C- in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp,

## R<sup>0</sup> and R<sup>00</sup> are independently of each other H or alkyl with 1 to 12 C-atoms, and

## Y<sup>1</sup> and Y<sup>2</sup> are independently of each other H, F, Cl or CN,

and the aromatic rings are optionally substituted with 1, 2 or 3 F, Cl, Br, I, CN, NO<sub>2</sub>, NCS, SF<sub>5</sub> or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, monoor poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH<sub>2</sub> groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, - NR<sup>0</sup>-, -SiR<sup>0</sup>R<sup>00</sup>-, -CO-, -COO-, -OCO-O-, -S-CO-, -CO-S-, -CY<sup>1</sup>=CY<sup>2</sup>- or -C=C- in such a manner that O and/or S atoms are not linked directly to one another, or with P-Sp.

13. (Currently Amended) A compound according to claim 3, which is of one of the following formulae

- 13 -

- 14 - DOCKET NO.: MERCK-3113

wherein

P is a polymerizable or reactive group,

Sp

is a spacer group or a single bond,

R and R'

are, independently of each other, F, Cl, Br, I, CN, NO<sub>2</sub>, NCS, SF<sub>5</sub> or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH<sub>2</sub> groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR<sup>0</sup>-, -SiR<sup>0</sup>R<sup>00</sup>-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY<sup>1</sup>=CY<sup>2</sup>- or -C=C- in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp,  $\underline{B(OR^{**})(OR^{**})}$ ,  $\underline{SnR^{*}R^{*xx}R^{*xx}}$  or  $\underline{SiR^{*}R^{*xx}R^{*xx}}$   $\underline{B(OR^{*})(OR^{**})}$ ,  $\underline{SnR^{0}R^{00}R^{00}}$  or  $\underline{SiR^{0}R^{00}R^{000}}$ ,

## $R^{x}$ , $R^{xx}$ and

R<sup>xxx</sup> are, independently of each other, H, aryl or alkyl with 1 to 12 C-atoms,

R<sup>x<sub>1</sub></sup> and R<sup>x<sub>2</sub></sup> are, independently of each other, H or alkyl with 1 to 12 C-atoms, or OR<sup>x<sub>3</sub></sup> and OR<sup>x<sub>3</sub></sup> together with the boron atom form a cyclic group having 2 to 10 C atoms

R" and R" are, independently of each other, F, Cl, Br, I, CN, NO<sub>2</sub>, NCS, SF<sub>5</sub> or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH<sub>2</sub> groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR<sup>0</sup>-, -SiR<sup>0</sup>R<sup>00</sup>-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY<sup>1</sup>=CY<sup>2</sup>- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp, and

 $L^1$  and  $L^2$  are independently of each other H or F,

R<sup>0</sup> and R<sup>00</sup> are independently of each other H or alkyl with 1 to 12 C-atoms, and

 $Y^1$  and  $Y^2$  are independently of each other H, F, Cl or CN,

and the aromatic rings are optionally substituted with 1, 2 or 3 F, Cl, Br, I, CN, NO<sub>2</sub>, NCS, SF<sub>5</sub> or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or

poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent  $CH_2$  groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR<sup>0</sup>-, -SiR<sup>0</sup>R<sup>00</sup>-, -CO-, -COO-, -OCO-O-, -S-CO-, -CO-S-, -CY<sup>I</sup>=CY<sup>2</sup>- or -C $\equiv$ C- in such a manner that O and/or S atoms are not linked directly to one another, or with P-Sp.

- 14. (Previously Presented) An LC medium comprising at least one compound according to Claim 2.
- 15. (Previously Presented) A polymerizable LC material comprising at least one compound according to Claim 2 and optionally at least one further compound, wherein at least one of said compounds is polymerizable.
- 16. (Previously Presented) A polymer which has been obtained by polymerizing a compound of formula I1 according to Claim 2 or a polymerizable LC material comprising at least one compound of formula I1 and optionally at least one further compound, wherein at least one of said compounds is polymerizable.
- 17. (Previously Presented) An anisotropic polymer which has been obtained by polymerizing a compound of formula I1 according to Claim 2 or a polymerizable LC material comprising a compound of formula I1 in its oriented state in form of a film.
- 18. (Previously Presented) A semiconductor or charge transport material comprising at least one

compound of formula I1 according to Claim 2,

polymerizable LC material comprising at least one compound of formula I1 and optionally at least one further compound, wherein at least one of said compounds is polymerizable, or

polymer which has been obtained by polymerizing a compound of formula I1 or a polymerizable LC material comprising at least one compound of formula I1 and optionally at least one further compound, wherein at least one of said compounds is polymerizable.

19. (Previously Presented) A light-emissive material comprising at least one compound of formula I1 according to Claim 2,

- 17 - DOCKET NO.: MERCK-3113

polymerizable LC material comprising at least one compound of formula I1 and optionally at least one further compound, wherein at least one of said compounds is polymerizable, or

polymer which has been obtained by polymerizing a compound of formula I1 or a polymerizable LC material comprising at least one compound of formula I1 and optionally at least one further compound, wherein at least one of said compounds is polymerizable.

20. (Previously Presented) An electrooptical display, LCD, eLCD, optical film, polarizer, compensator, beam splitter, reflective film, alignment layer, color filter, holographic element, hot stamping foil, colored image, decorative or security marking, consumer object, document of value, LC pigment, adhesive, synthetic resin with anisotropic mechanical properties, cosmetic product, pharmaceutical product, diagnostic product, nonlinear optical element, optical information storage device, a chiral dopant, an electronic device, OFET, a component of an integrated circuit (IC), thin film transistor (TFT) in a flat panel display, Radio Frequency Identification (RFID) tag, a semiconducting or light-emitting component of organic light emitting diode (OLED), electroluminescent display or backlight of an LCD, photovoltaic or sensor device, an electrode material in a battery, a photoconductor, or electrophotographic recording or alignment layer in an LCD or OLED device, comprising at least one

compound of formula I1 according to Claim 2,

polymerizable LC material comprising at least one compound of formula I1 and optionally at least one further compound, wherein at least one of said compounds is polymerizable, or

polymer which has been obtained by polymerizing a compound of formula I1 or a polymerizable LC material comprising at least one compound of formula I1 and optionally at least one further compound, wherein at least one of said compounds is polymerizable,

or a semiconductor or light-emitting material comprising at least one of said compound, polymerizable LC material or polymer.

21. (Previously Presented) An optical electrooptical or electronic device, LCD, eLCD, OLED, OFET, IC, TFT or alignment layer, comprising at least one compound of formula I1 according to Claim 2, polymerizable LC material comprising at least one compound of formula I1 and

- 18 - DOCKET NO.: MERCK-3113

optionally at least one further compound, wherein at least one of said compounds is polymerizable, or

polymer which has been obtained by polymerizing a compound of formula I1 or a polymerizable LC material comprising at least one compound of formula I1 and optionally at least one further compound, wherein at least one of said compounds is polymerizable,

or a semiconductor or light-emitting material comprising at least one of said compound, polymerizable LC material or polymer.

A TFT or TFT array for a flat panel display, 22. (Previously Presented) RFID tag, electroluminescent display or backlight, comprising at least one compound of formula I1 according to Claim 2,

polymerizable LC material comprising at least one compound of formula I1 and optionally at least one further compound, wherein at least one of said compounds is polymerizable, or

polymer which has been obtained by polymerizing a compound of formula I1 or a polymerizable LC material comprising at least one compound of formula I1 and optionally at least one further compound, wherein at least one of said compounds is polymerizable,

or a semiconductor or light-emitting material comprising at least one of said compound, polymerizable LC material or polymer.

A security marking or device, comprising at 23. (Previously Presented) least one

compound of formula I1 according to Claim 2,

polymerizable LC material comprising at least one compound of formula I1 and optionally at least one further compound, wherein at least one of said compounds is polymerizable, or

polymer which has been obtained by polymerizing a compound of formula I1 or a polymerizable LC material comprising at least one compound of formula I1 and optionally at least one further compound, wherein at least one of said compounds is polymerizable,

or a semiconductor or light-emitting material comprising at least one of said compound, polymerizable LC material or polymer.

A compound according to Claim 4, wherein A<sup>1-3</sup> 24. (Previously Presented)

are, each independently, furane-2,5-diyl, thiophene-2,5-diyl, thienothiophene-2,5-diyl, dithienothiophene-2,6-diyl, pyrrol-2,5-diyl, 1,4-phenylene, azulene-2,6-diyl, pyridine-2,5-diyl, pyrimidine-2,5-diyl, naphthalene-2,6-diyl, 1,2,3,4-tetrahydro-naphthalene-2,6-diyl, indane-2,5-diyl, or 1,4-cyclohexylene, wherein one or two non-adjacent CH<sub>2</sub> groups are optionally replaced by O and/or S, wherein these groups are unsubstituted, mono- or polysubstituted by R<sup>3</sup>.

25. (New) A compound according to claim 3, which is of formulae I2c

wherein

are, independently of each other, F, Cl, Br, I, CN, NO<sub>2</sub>, NCS, SF<sub>5</sub> or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH<sub>2</sub> groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR<sup>0</sup>-, -SiR<sup>0</sup>R<sup>00</sup>-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY<sup>1</sup>=CY<sup>2</sup>- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp, B(OR<sup>xr</sup>)(OR<sup>xn</sup>), SnR<sup>x</sup>R<sup>xx</sup>R<sup>xxx</sup> or SiR<sup>x</sup>R<sup>xx</sup>R<sup>xxx</sup>,

Rx, Rxx and

R<sup>xxx</sup> are, independently of each other, H, aryl or alkyl with 1 to 12 C-atoms,

R<sup>x<sub>1</sub></sup> and R<sup>x<sub>11</sub></sup> are, independently of each other, H or alkyl with 1 to 12 C-atoms, or OR<sup>x<sub>1</sub></sup> and OR<sup>x<sub>11</sub></sup> together with the boron atom form a cyclic group having 2 to 10 C atoms

R" and R" are, independently of each other, F, Cl, Br, I, NO<sub>2</sub>, NCS, SF<sub>5</sub> or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-

- 20 - DOCKET NO.: MERCK-3113

substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent  $CH_2$  groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR<sup>0</sup>-, -SiR<sup>0</sup>R<sup>00</sup>-, -CO-, -COO-, -OCO-, -OCO-O-, -S-CO-, -CO-S-, -CY<sup>1</sup>=CY<sup>2</sup>- or -C $\equiv$ C- in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp,

R<sup>0</sup> and R<sup>00</sup> are independently of each other H or alkyl with 1 to 12 C-atoms, and

Y<sup>1</sup> and Y<sup>2</sup> are independently of each other H, F, Cl or CN,

and the aromatic rings are optionally substituted with 1, 2 or 3 F, Cl, Br, I, CN, NO<sub>2</sub>, NCS, SF<sub>5</sub> or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent  $CH_2$  groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR<sup>0</sup>-, -SiR<sup>0</sup>R<sup>00</sup>-, -CO-, -COO-, -OCO-O-, -S-CO-, -CO-S-, -CY<sup>1</sup>=CY<sup>2</sup>- or -C $\equiv$ C- in such a manner that O and/or S atoms are not linked directly to one another, or with P-Sp.

- 26. (New) A compound according to claim 2, wherein

  R<sup>5</sup> to R<sup>6</sup> are, independently of each other, F, I, NO<sub>2</sub>, NCS, SF<sub>5</sub> or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or polysubstituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH<sub>2</sub> groups are optionally replaced, in each case independently from one another, by O-, -S-, -NH-, -NR<sup>0</sup>-, -SiR<sup>0</sup>R<sup>00</sup>-, -CO-, -COO-, -OCO-O-, -S-CO-, -CO-S-, -CY<sup>1</sup>=CY<sup>2</sup>- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp.
- 27. (New) A compound according to claim 2, wherein

  R<sup>5</sup> to R<sup>6</sup> are, independently of each other, NO<sub>2</sub>, NCS, SF<sub>5</sub> or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH<sub>2</sub> groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR<sup>0</sup>-, -SiR<sup>0</sup>R<sup>00</sup>-, -CO-, -COO-, -OCO-O-, -S-CO-, -CO-S-, -

- 21 - DOCKET NO.: MERCK-3113

CY¹=CY²- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp.

- 28. (New) A compound according to claim 3, wherein

  R<sup>5</sup> to R<sup>6</sup> are, independently of each other, NO<sub>2</sub>, NCS, SF<sub>5</sub> or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH<sub>2</sub> groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR<sup>0</sup>-, -SiR<sup>0</sup>R<sup>00</sup>-, -CO-, -COO-, -OCO-O-, -S-CO-, -CO-S-, -CY<sup>1</sup>=CY<sup>2</sup>- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp.
- 29. (New) A compound according to claim 4, wherein

  R<sup>5</sup> to R<sup>6</sup> are, independently of each other, NO<sub>2</sub>, NCS, SF<sub>5</sub> or a straight chain or branched alkyl having 1 to 30 C-atoms that is unsubstituted, mono- or poly-substituted by F, Cl, Br, I or CN, and in which one or more non-adjacent CH<sub>2</sub> groups are optionally replaced, in each case independently from one another, by -O-, -S-, -NH-, -NR<sup>0</sup>-, -SiR<sup>0</sup>R<sup>00</sup>-, -CO-, -COO-, -OCO-O-, -S-CO-, -CO-S-, -CY<sup>1</sup>=CY<sup>2</sup>- or -C≡C- in such a manner that O and/or S atoms are not linked directly to one another, or are P-Sp.